

Amendments to Claims:

This listing of claims will replace all prior versions and listings of the claims in the application:

Listing of Claims:

1-16. (canceled)

17. (currently amended) A method for separating mixed particulate material into particles of at least two different specific gravities, comprising:

providing at least one mixed particulate material separating apparatus including a separating chamber and an angle of entry connection, the angle of entry connection being angled upwardly with respect to the separating chamber;

providing a flow of air from an air flow source through a mixed particulate material separating apparatus, causing creating a vacuum which provides suction to the to occur whereby mixed particulate material enters the mixed particulate material separating apparatus chamber to draw mixed particulate material into the separating chamber through the angle of entry connection so that the mixed particular material has both upward and horizontal velocity components; and

separating the mixed particulate material into a lower specific gravity and a higher specific gravity by the vacuum pulling the lower specific gravity material up and out of the mixed particulate material separating apparatus via the discharge tube, and allowing the higher specific gravity material to fall from the mixed particulate material separating apparatus chamber.

18. (original) The method for separating mixed particulate material into particles of at least two different specific gravities according to claim 17, further comprising:

providing the mixed particulate material to the mixed particulate material separating apparatus.

19. (currently amended) The method for separating mixed particulate material into particles of at least two different specific gravities according to claim 18, further comprising:

collecting the material with a higher specific gravity at a bottom of the ~~mixed-particulate material-separating apparatus~~chamber; and

releasing the collected material with a higher specific gravity at a predetermined interval of time.

20. (currently amended) A method for separating mixed particulate material into particles of at least two different specific gravities, comprising:

providing a first mixed particulate material separating apparatus including a separating chamber, and an angle of entry connection, the angle of entry connection being angled upwardly with respect to the separating chamber;

~~providing a first flow of air from an air flow source through a~~the first mixed particulate material-separating apparatus, causing~~creating~~ a vacuum to occur whereby mixed particulate material enters the mixed particulate material separating apparatus through the angle of entry connection so that the mixed particular material has both upward and horizontal velocity components;

separating initially the mixed particulate material into a lower specific gravity and a higher specific gravity by the vacuum pulling at least a portion of the lower specific gravity material up and out of the first mixed particulate material separating apparatus, and allowing an initially separated mixed particulate material which comprises the higher specific gravity material and remainder of the lower specific gravity material to fall from the mixed particulate material separating apparatus;

moving the initially separated mixed particulate material to a second mixed particulate material separating apparatus;

providing a ~~second~~-flow of air from ~~an~~the air flow source to the second mixed particulate material separating apparatus; and

separating further the mixed particulate material into a lower specific gravity and a higher specific gravity by the ~~second~~-flow of air discharging at least a portion of the remainder of the lower specific gravity material up and out of the second mixed particulate material separating apparatus, and allowing the higher specific gravity material to fall from the second mixed particulate material separating apparatus.

21. (original) The method for separating mixed particulate material into particles of at least two different specific gravities according to claim 20, further comprising:

transporting the higher specific gravity material away from the second mixed particulate material separating apparatus.

22. (canceled).

23. (currently amended) The method for separating mixed particulate material into particles of several different specific gravities according to claim 20, wherein the step of moving the initially separated mixed particulate material to ~~the~~a second mixed particulate material separating apparatus comprises:

transporting the initially separated mixed particulate material to a second discharge tube, ~~comprising a first end, second end and a hopper.~~

24. (currently amended) A method for separating mixed particulate material into particles of at least ~~two~~four different specific gravities, comprising:

providing a first mixed particulate material separating apparatus including a separating chamber, and an angle of entry connection, the angle of entry connection being angled upwardly with respect to the separating chamber;

~~providing a first flow of air from an air flow source through a first mixed particulate material separating apparatus, causing~~creating a vacuum to occur whereby mixed particulate material enters the first mixed particulate material separating apparatus ~~through the angle of entry connection so that the mixed particular material has both upward and horizontal velocity components;~~

separating initially the mixed particulate material into a first group and a second group of mixed particulate material by the vacuum pulling at least a portion of the first group of mixed particulate material up and out of the first mixed particulate material separating apparatus, and allowing the second group of mixed particulate material to fall from the first mixed particulate material separating apparatus;

providing a second mixed particulate material separating apparatus and a second flow of air from an air flow source through thea second mixed particulate material separating apparatus including a discharge tube, a separating chamber, and an angle of entry connection;

~~providing a second flow of air from an air flow source through a second mixed particulate material separating apparatus, causing a vacuum to occur whereby the second group of mixed particulate material enters the second mixed particulate material separating apparatus;~~

~~separating secondly the second group of particulate material into a third and fourth group of mixed particulate material, by the vacuum pulling the third group of mixed particulate material up and out of the second mixed particulate material separating apparatus, and allowing the fourth group of mixed particulate material to fall from the mixed particulate material separating apparatus;~~

~~providing a third flow of air from an air flow source through a third mixed particulate material separating apparatus, causing a vacuum to occur whereby the fourth group of mixed particulate material enters the third mixed particulate material separating apparatus; and~~

~~separating thirdly the fourth group of particulate material into a fifth and sixth group of mixed particulate material, by the vacuum pulling the fifth group of mixed particulate material up and out of the third mixed particulate material separating apparatus, and allowing the sixth group of mixed particulate material to fall from the mixed particulate material separating apparatus.~~

25. (canceled)

26. (new) The method for separating mixed particulate material into particles of at least two different specific gravities according to claim 17, wherein

the angle between the angle of entry connection and the separation chamber is between about 40° and 50°.

27. (new) The method for separating mixed particulate material into particles of at least two different specific gravities according to claim 17, wherein

the angle between the angle of entry connection and the separation chamber is about 45°.

28. (new) The method for separating mixed particulate material into particles of at least two different specific gravities according to claim 20, wherein

the angle between the angle of entry connection and the separation chamber is between about 40° and 50°.

29. (new) The method for separating mixed particulate material into particles of at least two different specific gravities according to claim 20, wherein

the angle between the angle of entry connection and the separation chamber is about 45°.

30. (new) The method for separating mixed particulate material into particles of at least two different specific gravities according to claim 24, wherein

the angle between the angle of entry connection and the separation chamber is between about 40° and 50°.

31. (new) The method for separating mixed particulate material into particles of at least two different specific gravities according to claim 24, wherein

the angle between the angle of entry connection and the separation chamber is about 45°.